

PROGRAMMABLE VARIABLE SPRING MEMBER

ABSTRACT OF THE DISCLOSURE

A variable spring member includes a containment housing defining an inner chamber with alternating layers of compressible medium and electro-reactive medium. Adjacent each layer of electro-reactive medium is a coil assembly controlled by a controller. A sealed plate disposed between alternating layers of compressible medium and electro-reactive medium disperses a load exerted on the variable spring member assembly and prevents intermixing of compressible medium with the electro-reactive medium. Actuation of the coil assembly changes physical characteristics and compressibility of the layer of electro-reactive medium to vary spring rate and stiffness.

N:\Clients\MERITOR\IP01269\PATENT\Pat application 60130-1269.doc